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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,632	01/09/2002	Hyun-sook Kang	Q65113	3030

7590 04/10/2007
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EXAMINER

QURESHI, AFSAR M

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/040,632

Applicant(s)

KANG ET AL.

Examiner

Afsar M. Qureshi

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Response to Amendment

1. This action is responsive to REMARKS/Arguments received on 2/13/2007. No amendments were made to any claims.

Response to Arguments

2. Applicant's arguments filed 2/13/2007 have been fully considered but they are not persuasive.

Applicant argued that cited reference Jang does not disclose or suggest detecting an amount of slot usage according to the destination and selecting a temporary master device according to the amount of slot usage (page 2). Applicant further argued, "even if one of ordinary skilled in the art at the time the invention was made had been motivated to combine the references, the combined references would still not result in the features claimed by Applicants".

Examiner, respectfully, disagrees with the Applicant's arguments, 'during examination the pending claims must be given their broadest reasonable interpretation. Consistent with the specification the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach...' (MPEP § 2111-01). The rationale to combine or modify the prior art does not have to be expressly stated in the prior art, the rationale may be expressly or impliedly reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles or legal precedent established by prior case laws, *In re*

Art Unit: 2616

Fine, 837 F.2d 1071, 5USPQ2d, 1596 (Fed. Cir. 1988) and Ex Parte Levengood, 28 USPQ2d 1300.

As to the limitations, Jang clearly discloses that the push server becomes the temporary master push server (see paragraphs 9, 15 and 21). Jang further discloses watching/monitoring the message queues and pushing the data through based on monitoring. One of ordinary skill in the art will readily realize, among other possibilities, that, data can only be pushed through a slot/queue if it is not being used or it has enough capacity to allow further data to be pushed through. As stated in paragraph 37, the invention by Jang is subject to substitutions and changes envisioned by a skilled artisan in the pertinent art.

Since no amendments are made to the claims, Examiner maintains the same rejection, as follows:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rune (US Pub. 2001/0002906.), in view of Jang et al. ('Jang' hereinafter), Pub. No. 10-2001-0004954 (Korean Appl. No. 10-1999-0025728).

claims 1-3, 6-7, 10, and 13. Rune teaches a wireless communication apparatus, system, and method (Fig. 6, Rune) comprising:

A transceiver unit for receiving and transmitting data (Radio unit 601, Fig. E Rune)

A controller unit 602, connected to host 607 via communication interface CPU 603 (claim 6), CPU 603 is connected to the memory 604 (claim 2) paragraph [0005] and [0055]). A master device M, with slave devices connected to master device M, (see figs. 3) for analyzing destination of a packet received for a certain period of time (Rune teaches method steps of analyzing the header of the packet and IP header that includes the destination of a packet. See sec [0031], [0035], [0037], and [0069], claim 7).

Rune further discloses that above systems could be implemented as the master unit (Fig.7, sec [0006], Rune.) and can be connected to a host via communication interface (Fig. 6, Rune.) Rune also shows a memory for storing the packet status of the wireless communication (Fig. 6, Rune.)

Rune also teaches method steps of detecting the destination (analyzing the packet data). Rune further discloses that the packet could hold different timeslots. Therefore, different packet with different destination would have different amount of slot usage and need to be analyzed as well. See sec [0004], [0010], and [0057], Rune.) Packet/multipacket length could also often be considered as slot usage. In other words, different channel can be assigned to different destination. Some channels would be using multi-timeslots and the other be only using single timeslot (sec [0004], Rune.)

Rune does not specifically disclose selecting a temporary master device according to the amount of slot usage, as recited in claim 1.

Jang, in the same field of endeavor, discloses selecting a slave server as master push server (temporary master) based on slot usage (see Abstract, paragraph 14 under heading "Structure & Operation of the Invention").

Rune desires to improve transmission from slave device (temporary master device) to another slave device, especially in a scatternet environment, without creating unnecessary processing overhead. It would have been obvious to one having ordinary skill in the art, at the time of invention, to be able to utilize push system, taught by Jang, and modify Rune in order to configure slave device into temporary master device so that low-level routing of a packet can be achieved thus avoiding unnecessary data overhead in case of a single master device.

Claims 4-5, 8-9, 11-12, and 14-15.

Rune does not specify whether or not the controller selects the temporary master device. However, Jang discloses server control system 15 (controller), performing the role of master device depending on the information in the message queue, selects the slave push server¹⁶ (see figure 1, paragraphs 21 and 22) based on message length in the message queue (see paragraph 24). Again, the motivation to modify Rune would have been the same as stated in the rejection of claim 1 above.

Allowable Subject Matter

4. Claims 16-18 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose the method steps of determining whether or not a switching period has passed as packets are sent/received and increasing the number of slot usage according to a destination recorded in the packet.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M. Qureshi whose telephone number is (571) 272 3178.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Field Lynn can be reached on (571) 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



AFSAR QURESHI
PRIMARY EXAMINER

4/5/2007